

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1 (currently amended): An isolated nucleic acid encoding an ABCG8
2 polypeptide, said polypeptide comprising an amino acid sequence that is at least ~~about 70%~~
3 **75%** identical to **the full-length of** an amino acid sequence as set forth in SEQ ID NO: ~~[[4 or]]~~ 8,
4 **wherein said polypeptide acts to effect sterol transport.**

1 2 (currently amended): The nucleic acid of claim 1, wherein said polypeptide
2 specifically binds to polyclonal antibodies generated against a polypeptide that comprises an
3 amino acid sequence ~~selected from the group consisting of SEQ ID NO:4 and~~ SEQ ID NO:8.

1 3 (currently amended): The nucleic acid of claim 1, wherein said polypeptide
2 comprises an amino acid sequence **having 100% identity to the full length of** ~~selected from~~
3 ~~the group consisting of SEQ ID NO:4 and~~ SEQ ID NO:8.

1 4 (original): The nucleic acid of claim 1, wherein said polypeptide forms a dimer
2 with a second ABC polypeptide, and wherein said dimer exhibits sterol transport activity.

1 5 (original): The nucleic acid of claim 4, wherein said dimer is a heterodimer.

1 6 (original): The nucleic acid of claim 4, wherein said sterol is cholesterol.

1 7 (original): The nucleic acid of claim 5, wherein said second ABC polypeptide
2 is an ABCG5 polypeptide.

8-12 (canceled)

1 13 (currently amended): The nucleic acid of claim 1, wherein said nucleic acid
2 hybridizes under moderately stringent hybridization conditions to a nucleic acid comprising a
3 nucleotide sequence as set forth in SEQ ID NO: **[[3 or]]** 7.

1 14 (currently amended): The nucleic acid of claim 13, wherein said nucleic acid
2 hybridizes under stringent hybridization conditions to a nucleic acid comprising a nucleotide
3 sequence as set forth in SEQ ID NO: **[[3 or]]** 7.

1 15 (currently amended): The nucleic acid of claim 1, wherein said nucleic acid
2 comprises a nucleotide sequence at least ~~about 70%~~ 80% identical to the full-length of a
3 sequence as set forth in SEQ ID NO: **[[3 or]]** 7.

1 16 (currently amended): The nucleic acid of claim 1, wherein said nucleic acid
2 comprises a nucleotide sequence having 100% identity to the full length of as set forth in
3 SEQ ID NO: **[[3 or]]** 7.

1 17 (original): The nucleic acid of claim 1, wherein said nucleic acid is from a
2 mouse or a human.

1 18 (original): The nucleic acid of claim 1, wherein said nucleic acid is expressed
2 in the intestine or in the liver in the presence of an LXR agonist.

1 19 (original): The nucleic acid of claim 1, wherein said nucleic acid is expressed
2 in a tissue selected from the group consisting of liver, jejunum, ileum, and duodenum.

1 20 (original): An expression cassette comprising the nucleic acid of claim 1
2 operably linked to a promoter.

1 21 (original): An isolated cell comprising the expression cassette of claim 20.

1 22 (withdrawn): An isolated ABCG8 polypeptide, said polypeptide comprising
2 an amino acid sequence that is at least about 70% identical to an amino acid sequence as set forth
3 in SEQ ID NO:4 or 8.

1 23 (withdrawn): The isolated polypeptide of claim 22, wherein said polypeptide
2 selectively binds to polyclonal antibodies generated against a polypeptide comprising an amino
3 acid sequence as set forth in SEQ ID NO:4 or 8.

1 24 (withdrawn): The isolated polypeptide of claim 22, wherein said polypeptide
2 comprises an amino acid sequence as set forth in SEQ ID NO:4 or 8.

1 25 (withdrawn): The isolated polypeptide of claim 22, wherein said polypeptide
2 forms a dimer with a second ABC polypeptide, and wherein said dimer exhibits sterol transport
3 activity.

1 26 (withdrawn): The isolated polypeptide of claim 25, wherein said dimer is a
2 heterodimer.

1 27 (withdrawn): The isolated polypeptide of claim 26, wherein said second ABC
2 polypeptide is ABCG5.

1 28 (withdrawn): The isolated polypeptide of claim 27, wherein said ABCG5
2 polypeptide comprises an amino acid sequence that is at least about 70% identical to an amino
3 acid sequence as set forth in SEQ ID NO:2 or 6.

1 29 (withdrawn): The isolated polypeptide of claim 27, wherein said ABCG5
2 polypeptide selectively binds to polyclonal antibodies generated against a polypeptide
3 comprising an amino acid sequence as set forth in SEQ ID NO:2 or 6.

1 30 (withdrawn): The isolated polypeptide of claim 27, wherein said ABCG5
2 polypeptide comprises an amino acid sequence selected from the group consisting of SEQ ID
3 NO:2 and SEQ ID NO:6

1 31 (withdrawn): The isolated polypeptide of claim 25, wherein said sterol is
2 cholesterol.

1 32 (withdrawn): The isolated polypeptide of claim 22, wherein said polypeptide
2 is expressed in the intestine or in the liver in the presence of an LXR agonist.

1 33 (withdrawn): The isolated polypeptide of claim 22, wherein said polypeptide
2 is expressed in a tissue selected from the group consisting of the liver, jejunum, ileum, and
3 duodenum.

1 34 (withdrawn): The isolated polypeptide of claim 22, wherein said polypeptide
2 is from a mouse or a human.

1 35 (withdrawn): An antibody generated against the isolated polypeptide of claim
2 22.

1 36 (original): A method of making an ABCG8 polypeptide, the method
2 comprising:
3 (i) introducing a nucleic acid of claim 1, into a host cell or cellular extract; and
4 (ii) incubating said host cell or cellular extract under conditions such that said
5 ABCG8 polypeptide is expressed in the host cell or cellular extract.

1 37 (original): The method of claim 36, further comprising recovering the
2 ABCG8 polypeptide from the host cell or cellular extract.

38-70 (withdrawn)

1 71 (new): The nucleic acid of claim 1, wherein said polypeptide is at least 80%
2 identical to an amino acid sequence as set forth in SEQ ID NO: 8.

1 72 (new): The nucleic acid of claim 1, wherein said polypeptide is at least 85%
2 identical to an amino acid sequence as set forth in SEQ ID NO: 8.

1 73 (new): The nucleic acid of claim 1, wherein said polypeptide is at least 90%
2 identical to an amino acid sequence as set forth in SEQ ID NO: 8.

1 74 (new): The nucleic acid of claim 1, wherein said polypeptide is at least 95%
2 identical to an amino acid sequence as set forth in SEQ ID NO: 8.

1 75 (new): The nucleic acid of claim 1, wherein said nucleic acid comprises a
2 nucleotide sequence at least 85% identical to a sequence as set forth in SEQ ID NO:7.

1 76 (new): The nucleic acid of claim 1, wherein said nucleic acid comprises a
2 nucleotide sequence at least 90% identical to a sequence as set forth in SEQ ID NO:7.

1 77 (new): The nucleic acid of claim 1, wherein said nucleic acid comprises a
2 nucleotide sequence at least 95% identical to a sequence as set forth in SEQ ID NO:7.

1 78 (new): The nucleic acid of claim 1, wherein said nucleic acid comprises a
2 conserved exon sequence selected from the group consisting of
3 CTGGTAGGTGAGATCTCTGACCTCCAGAGTGTTGGACTGACCACTGTAGGTGAAGTA
4 CAGACTGTTGTCACTTTCCGAGGAGAACAAGCTGTCCTGGAGGCC and
5 CGAAGCATCCTGAAGTACAGTCCCATTCCACAGCTGGGTCTCTTCTTTGGTTTTCTCA
6 GCCAT, or the complementary sequence thereof.